

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/KR2004/002352

## A. CLASSIFICATION OF SUBJECT MATTER

**IPC7 H04B 1/40**

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H04B 1/40

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
Korean Patents and applications for inventions since 1975, Korean Utility models and applications for Utility models since 1975  
Japanese Utility models and applications for Utility models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y1	KR 20-266509 Y (GAIA TELECOM CORP.) 18 FEB 2002, see page 3 and claim 1	1,4,15
Y1	KR 2003-047095 A (LG ELECTRONICS CO., LTD.) 18 JUN 2003, see page 2	1,4,15
Y1	JP 2000-137556 A (SONY CORP.) 16 MAY 2000, see page 2 and claims 1,4	1,4,15
Y2	KR 2001-097336 A (NEXZEN COMMUNICATION CORP.) 8 NOV 2001, page 3	1,4,15
A	JP 2001-272413 A (MICROSTONE CORP.) 5 OCT 2001, page 2	1,4,15
A	JP 2003-199973 A (YAMAHA CORP.) 15 JUL 2003, see abstract	1,4,15
P	KR 2004-057415 A (SAMSUNG ELECTRONICS CO., LTD.) 2 JUL 2004, see page 3-4	1,4,15

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

20 DECEMBER 2004 (20.12.2004)

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23 DECEMBER 2004 (23.12.2004)

Name and mailing address of the ISA/KR



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